Question:

Why does the purported 15% error rate identified by KPMG not impact due dates. Specifically, show the impact of human error on due dates by product. Moreover, show the impact of erroneously rejected LSRs by product.

Answer:

As an initial matter, KPMG did not conclude that Qwest has a 15% error rate whenever manual processing is involved. AT&T's calculation of this percentage is based on a very small number of orders (49-76 orders, depending on the source) analyzed by KPMG. Other data sources with greater sample sizes provide a different picture of the manual processing error rate.

Liberty Audit

Qwest participated in a data reconciliation effort where approximately 10,000 orders and trouble tickets were analyzed. The entire purpose of the data reconciliation effort was to analyze input data; in other words, information input on a manual basis by human beings. During that eight-month effort, which considered hundreds of thousands of pages of material, Liberty issued seven Observations that concerned human error. Specifically:

- Observation 1031: Affected 0.5% of interconnection trunk orders.
- Observation 1032: Affected less than 4% of unbundled loop orders and made Qwest's performance look worse than it was in reality.
- Observation 1033: Affected less than 2% of interconnection trunk and unbundled loop orders and tended to get CLECs the ordered product sooner.
- Observation 1028: Affected 6.5% of unbundled loop trouble reports, which sometimes hurt and sometimes helped Qwest's performance data.
- Observation 1034: This human error was rectified in mid-2001 and Liberty verified it is no longer contained in the performance data.
- Observation 1036: Affected less than 0.3% of interconnection trunk orders and is no longer contained in the performance data.

- Observation 1037: This human error was rectified in mid-2001 and Liberty verified it is no longer contained in the performance data.

Liberty's aggregate results demonstrate that 6% of historic unbundled loop orders contain human error, which errors tend to help CLECs. This data shows that 2.8% of historic interconnection trunk orders contain human error. Thus, AT&T's claims that 15% of manually processed orders contain human error thereby causing CLECs substantial harm is not supported by the Liberty Data Reconciliation.

Of the seven categories of errors identified by Liberty, only one could even arguably affect the date on which the CLEC obtains the requested product. That issue, found in Observation 1033, concerned incorrect identification of the "Application Date." The Application Date is the business day on which Qwest agrees it received the order. For unbundled loops, and non-designed products such as Resale POTS and UNE-P POTS, Qwest business rules state that the Application Date is the next business day for orders received after 7:00 p.m. For interconnection trunks, and designed products such as Resale private line and UDIT, Qwest business rules state that the Application Date is the next business day for orders received after 3:00 pm. Both Liberty (with respect to design products) and KPMG (with respect to non-design products)[28] found that there was some percentage of human error associated with identifying the correct Application Date.

To the extent that manual errors are made on the Application Date, they can affect the ultimate Due Date. However, they will not always affect the due date. If the CLEC schedules an appointment for outside dispatch or requests an extended interval, the due date is not affected by the Application Date. Additionally, KPMG found occurrences where the Application Date was entered incorrectly by Qwest but the Due Date was determined accurately. The system edits reduce the likelihood that manual processing errors will result in longer-than-appropriate intervals being applied. KPMG found for non-design orders, and Liberty found for unbundled loops, that Qwest occasionally starts the clock earlier than a strict reading of its business processes allow. This error has not tended to lengthen actual provisioning intervals. Qwest has been unable to find even one order involved in the Liberty Data Reconciliation for unbundled loops where the clock started later than it should have.

Interconnection trunks were the one product where evidence from the Data Reconciliation shows that Qwest occasionally started the clock too late. Liberty found a few occasions (less than 1%) of the hundreds of interconnection trunk orders analyzed where Qwest started the clock late thereby lengthening the

28 *See Exception 3120.*

interval for the CLEC. Qwest retrained its affected employees to make sure this problem did not recur.

Internal Audit of Application Date Accuracy

Qwest implemented an internal audit process to check a percentage of the orders to verify that the Application date is correctly entered. Qwest began this audit in late January 2002. Initially the universe of orders for the audit included both flow-through and manually-processed orders. The universe of orders was modified for the audits completed in March and April to include only manually processed service orders. The results of those audits are shown in the following table.

PRODUCT	Mar-02		Apr-02	
	# Orders Sampled	APP Accuracy	# Orders Sampled	APP Accuracy
Resale POTS	226	96.0%	195	99.0%
UNE-P POTS	146	97.3%	138	98.6%
Combined: Resale POTS/UNE-P POTS	372	96.5%	333	98.8%
Unbundled Loops	383	98.2%	365	99.5%

As can be seen, the accuracy of the application dates shows an upward trend and is high for both months analyzed.

Reject in Error

The second portion of the question concerns erroneously rejected LSRs, and the affect this would have on intervals. Last week, Qwest provided a chart reflecting the total number of LSRs rejected in error, as determined by an FOC being issued after the reject. The Department asked that Qwest resubmit this data for the LSRs processed manually. Qwest has modified that chart to compare the manual rejects in error against a denominator of manually handed LSRs.

Percentage of Manually Processed LSRs Rejected in Error[29]

MONTH	# LSRs - FOC After Ordering Rejected	Total Manual LSRs Received	% of Manual LSRs FOC'd After Reject
Apr-01	774	71,715	1.08%
May-01	912	68,963	1.32%
Jun-01	926	58,683	1.58%
Jul-01	937	61,165	1.53%
Aug-01	1134	67,901	1.67%
Sep-01	852	58,694	1.45%

29 The May volume of manually-processed LSRs is still being calculated.

Oct-01	942	68,731	1.37%
Nov-01	766	62,328	1.23%
Dec-01	792	60,140	1.32%
Jan-02	726	69,146	1.05%
Feb-02	388	52,882	0.73%
Mar-02	368	52,236	0.70%
Apr-02	419	60,852	0.69%
May-02	417	70,551	0.59%

When compared to only manually handled LSRs, the percentage of rejects in error remains below 1%.

Third Party Test Support for Manual Order Accuracy

Qwest has heard claims that manual processing errors cause improperly-installed services, meaning that certain features requested on the LSRs are not provisioned because of SDC mistakes. KPMG specifically tested this in the Third Party Test through evaluation criterion 14-1-12, which evaluated LSRs submitted and compared the fields in those LSRs to the fields in the resulting CSR in Qwest's systems, and found this criterion "satisfied."[30] Similarly, KPMG evaluated whether Qwest switch translations contain required field inputs (14-1-3), and whether switch translations with disconnect orders are executed with the proper intercept-recording message (14-1-4) and are completed on the committed due date (14-1-5).[31] KPMG found that Qwest "satisfied" those criteria as well.[32] More generally, in Test 12.8, which focused exclusively on manual order processes, Qwest satisfied nine of the ten evaluation criteria. [33]

30 *See Final Report* at 186-187.

31 *See id.* at 182-183.

32 *See id.*

33 The remaining criteria (12.8-2) was deemed "unable to determine" as a result of Observation 3110. *See id.* at 145-46.

Question:

Why are FOCs sometimes followed by a jeopardy notification?

Answer:

There are a variety of reasons why Qwest can properly submit jeopardy after issuance of an FOC.

- Provisioning Jeopardy: If after the FOC has been issued Qwest determines that it cannot meet the due date because of either Qwest or customer-caused delays, a jeopardy notice is sent to the CLEC.

- Duplicate Requests: The CLEC submits a second LSR requesting the same work. When the requests are submitted very closely to one another, the first LSR has not processed completely. When this occurs, there are no pending service orders in the SOP that would allow the system edit or the service center to determine that this was a duplicate request before processing the second LSR.

- Inconsistent End User (EU) data: The CLEC submits an LSR with old EU data (end user name, address); however, a recent change has occurred (such as a move), and the CLEC submits the LSR during the normal posting period for the previous order.[34] In this circumstance, when the CLEC uses the old data, the old customer record (CSR) is still considered "live" (because the order has not posted yet), flow-through finds a match, and Qwest issues the service order(s) and FOC. The order then falls out during provisioning because the request does not have the correct address.

- Facility related: The CLEC has assigned the same "slot" (collocation tie down and/or EEL transport) on two different requests. The CLEC (and Qwest system/center) validate the slot as good on the second request because the service order (from the first LSR) has not progressed to TIRKS yet. The second LSR is processed and falls out in provisioning because the first LSR's service order has now progressed through provisioning and the slot is "pending in" and can't be used on the second request.

- Not a Working Account: This is very similar to inconsistent EU data. On a conversion, the end user customer has placed a disconnect on the line/account. Close to the disconnect due date, the CLEC submits a conversion; however, the disconnect order has not posted yet, and so the CSR still shows the

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34 KPMG found that Qwest satisfied test criterion 14-1-13, which related to timely updating of CSRs.

account as live. The CLEC and flow through/center process the conversion which falls out of provisioning because the line/account to be converted has been disconnected already by the end user.

- Error in LSR Processing: The CLEC LSR is not complete and accurate. The Qwest center overlooks the error prior to creating service orders and issuing the FOC. The error is then detected in provisioning. For example, the CLEC has omitted supplemental address information that is required.

Information is not available by product. PO-8 and PO-9 results are reported by broad product categories (resale, UNE-P, loops and LIS) but are not available disaggregated by the jeopardy categories noted above.

Question:

What does Qwest do to limit the percentage of human errors on orders?

Answer:

As an initial matter, the small number of human errors identified are within a reasonable tolerance level. The data from the Liberty Consulting Data Reconciliation make this plain. Nevertheless, Qwest has taken, and continues to take, quality assurance measures directed at reducing the number of human errors in order processing.

- Up-front IMA Edits: The first line of defense is the IMA edits. These edits prevent LSRs that contain errors from reaching Qwest. The more known errors that can be caught by the system, the less opportunity for manual error to occur. Qwest implements additional edits in every release of IMA, attempting to focus on those errors that are most prevalent on CLEC LSRs.

- Improved Flow-Through: With each improvement in Qwest's flow-through results, the opportunity for human error diminishes. Qwest has made significant improvements in our flow-through rates, more than doubling our resale rate from March 2001 to March 2002 (as measured in PO-2A) and nearly doubling our flow-through rate for the other products for that same timeframe. CLECs have an opportunity to work with Qwest to improve such flow-through rates through prioritization in the Change Management Process.

- SDC Training Curriculum: A training curriculum exists for each Qwest Service Delivery Coordinator (SDC) based on the product set that he/she will support. Each SDC completes the appropriate training and also "nests" with an experienced SDC following the training. This "nesting" period provides support to an individual until they are able to work independently. During the data reconciliation and OSS Test, both Liberty and KPMG evaluated much of this training material and found it sufficient.

- Interconnect Service Center Individual Quality Reviews: Center managers review service orders created by each SDC on their team on a weekly basis. Individual feedback is provided immediately. This review allows areas of misunderstanding or confusion to be addressed quickly and to not be masked in data that has been summarized. Additional training is provided if it is determined to be the reason for the performance gaps.

- Interconnect Service Center Trend Analysis: This work is a counterpart to the individual quality reviews. If center managers identify that a common error is

occurring across multiple individuals, a process exists for that information to be fed to the process support staff. At that point, the process staff will provide to all impacted centers a reminder of what process should be followed and, if appropriate, a job aid. These communications are delivered via an automated system to every coach in the impacted centers for review with their teams.

- Internal Audits: In cases where a concern has been raised, the process staff may also choose to do an internal audit to evaluate the level of the issue. The application date audit information provided above is one such example. These audits can be one-time or ongoing depending on the circumstances. Again, the information is used to identify a need for job aids, process clarifications, reminders to the centers, or system enhancements.

- Legacy System Enhancements: As described above, Qwest has and continues to implement improved edits in its IMA system to address common LSR errors. Qwest also implements edits in its internal systems to reduce or eliminate common Qwest processing errors.

- New Service Order Accuracy PID: Finally, in response to KPMG's Manual Order Entry PID Adequacy study, Qwest developed a new performance measurement (PO-20) to report on order accuracy. Qwest agreed to provide and discuss additional data in the context of Long Term PID Administration forums. However, due to the time it often takes to negotiate a new PID, rather than wait for the final version, Qwest will begin reporting data under this PID in its June results reported in July 2002. The data collected under this PID will be an additional source of information for Qwest to drive ongoing process improvements.

Qwest's Response to Error When It Does Occur: Despite the best efforts of the CLECs and Qwest, some LSRs will be received with errors and will be processed incorrectly. Similarly, in some circumstances, complete and accurate LSRs will be received and processed incorrectly. In these cases, Qwest again provides several avenues for the CLEC to obtain assistance.

- Online Status Tools Available through IMA: These tools provide a CLEC visibility to the order throughout the process. In IMA 10.1, scheduled for August 2002, this tool-set will be enhanced to include service order detail, which will be provided following the FOC.

- ISC Help Desk: CLECs can contact the Help Desk with any LSR-related issue. This is the optimal contact point for issues specific to one LSR.

- Service Management Team Assigned to the CLEC: CLECs can contact their service managers at any issue. If the CLEC believes they are seeing a pattern of problems with their LSRs, this is the best avenue for them to raise that issue.

- Change Management Process (CMP): Through CMP, CLECs can request system, product or process changes that would improve their interaction with Qwest.

In summary, Qwest's data shows that the percentage of human errors experienced by CLECs in manually processed orders is within the range of reasonableness to be expected. It is certainly substantially less than the 15% alleged by AT&T and Covad. This is evidenced by the Liberty Data Reconciliation, and internal audits of manually processed orders. Nonetheless, Qwest has implemented several tools to help both CLECs and Qwest minimize the number of opportunities for human error. Finally, Qwest has also implemented a series of tools that will allow CLECs to seek additional changes to the ordering and provisioning process.

Question:

What is the reason for PO-20's exclusion for service orders that result from non-fatally errored LSRs?

Answer:

The purpose of PO-20 is to measure consistency between a service order and the LSR from which it was generated. By definition, an LSR that receives a non-fatal error notice has something wrong with the data that was provided. A CLEC has three options when a non-fatal error is received.

The first option is to issue a supplemental order to cancel in which case the service order would not meet the criteria for PO-20 because it never completed.

The second option is to issue a supplemental order to correct the error on the LSR. In this case, the original LSR would be marked inactive and would not be included in PO-20 because that version of the LS would not be completed. However, the service order could be compared against the new, corrected LSR. Once Qwest receives the supplemental order the supplemental order would count as a service order and be included in the applicable PO-20 calculation.

The third option is to verbally authorize the center to correct the LSR's error(s) when the service order(s) are created. In this case, the service order would be based on a combination of LSR information and verbal corrections. Therefore, the process allows a known difference between the LSR and the service order, and it would be inappropriate to apply the PO-20 rules and count that order as a failure.

Question:

Is there a mismatch between the Loop Qualification Tool and the raw loop database?

Answer:

Qwest provides the CLECs with uniform loop make-up information. Moreover, Qwest does not reject loop orders, as the question implies. Instead, Qwest utilizes an "11-Step Process" to try and free up a loop to meet the CLEC's request.

Specifically, the source of Qwest Loop information for the purpose of determining qualification for DSL services resides in a single database. However, Qwest utilizes this database to offer two distinct tools through IMA for the CLEC community. First, the Qwest DSL for Resale portion of the "Loop Qualification Tool" is the same tool used by Qwest retail to qualify its loops and is also used to qualify potential customers for resold Qwest DSL service. Qwest uses a proprietary algorithm (taking into account Qwest's vendor equipment specifications) in this tool. Thus, this tool returns either a "Yes" or a "No" response indicating whether the particular loop is qualified for Qwest DSL. The raw data (or source Loop data) that is used for this algorithm is the same as found in the Raw Loop Data Tool. The Unbundled Loop Qualification portion of this tool is used to determine if the unbundled loop meets the technical requirements defined for the ADSL-compatible Loop product. This portion of the tool returns two levels of data to the CLEC. First, the query returns a loop qualification tab, which provides loop status,[35] a loop qualification message that contains some loop information,[36] and finally the loop product availability code to indicate which products are available. Second, the loop data tab returns information regarding the underlying characteristics of the Loop.

Qwest also offers the "Raw Loop Data Tool," which provides the CLEC community with loop make-up source data. The loop make-up information, such as, length, gauge, pair gain if present, load coils, bridge taps, cable pair information, and terminal names, are all found in this database. The CLEC then can apply its own DSL qualification algorithm (or the functional equivalent thereto) to the underlying make-up information to make a determination of loop suitability. Since the Qwest Loop Qualification Tool uses a proprietary algorithm and Raw Loop Data Tool does not, it is possible that a customer's loop would not

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35 The loop status field indicates whether the facilities qualify or not, whether a construction job, a bona fide request, or conditioning is required, and if the loop is too long.

36 The loop qualification message field returns: the telephone number or circuit ID (if the system is returning spare information it will contain a fictitious circuit ID); loop length; bridge tap length; the type of facility (copper or pair gain); the load type, if any; and the insertion loss calculated at 196 kilohertz frequency with 135 ohm terminations.

qualify using the Loop Qualification Tool under Qwest's algorithm, yet the CLEC would determine the same loop could serve customers using its flavor of DSL. Examples of this scenario are: a customer' loop is longer that what Qwest's DSL can support, or differences in acceptable noise levels between the CLEC and Qwest provided DSL service. Finally, if a CLEC is reselling Qwest DSL, the CLEC is bound by Qwest's own algorithm. If the CLEC is using unbundled elements, the CLEC sets its own parameters and uses its own algorithm.

In any event, however, Qwest does not reject orders for unbundled loops simply because they do not meet Qwest's standard for providing DSL. The SGAT, PCAT and Technical Publication all set forth the technical standards for providing a 2-Wire Non-Loaded Loop. Moreover, if the current loop does not meet this technical standard, Qwest will utilize the 11-Step process described in Exhibit WMC-LOOP-7 to William M. Campbell's Unbundled Loop Declaration. A "qualified" loop in the Raw Loop Data tool is simply not a prerequisite to ordering an unbundled loop to support xDSL.

Question:

From the Minnesota Discovery Request, was bulk MLT done to populate the Loop Qualification database?

Answer:

Bulk MLT Tests

When the Loop Qualification database was initially loaded with loop information from LFACs, some of the loops did not contain loop length, showing missing segments. As a result, Qwest (then U S WEST) performed some MLT tests to extract MLT distance data and, together with other distance database record information, obtained the estimated loop length for the missing segments and algorithmically populated the appropriate data for those segment distances for which it applied in the Loop Qualification database. Because both retail and CLECs use this database to perform loop qualification queries, and CLECs use this database to obtain raw loop data, this information is equally available to both Qwest Retail and CLECs. Any MLT distance data that was not used to populate the missing segments was referred to a dedicated engineering team for manual handling. The MLT system that Qwest currently has deployed does not return information on the presence of bridged taps and load coils. Thus, this extraction would not have had any such data from MLT and load coil and bridged tap information was not a part of this effort. For those missing segments which could not be fixed by this data extraction for distance information, Qwest again moved to improve its information by dedicating an engineering group of Senior and Lead engineers, to improving the information provided in LQDB. This is done via careful manual review of manual engineering records and back office systems to determine cable distances. Once the data is determined it is input to LFACS, which feeds the loop qualification data base. This dedication served both Qwest and the CLECs with its resulting improvement to LQDB.

History

A preliminary and limited Loop Qualification Database came into existence in the fall of 1998. This version contained limited loop information, but did not contain tariff information or DSLAM installation information. Believing that it would be more useful and accurate, Qwest moved to create LQDB as the single source to obtain loop qualification information. A revised LQDB, complete with loop information, tariff information, and DSLAM installation information (for those wire centers where Qwest had deployed DSLAM equipment), and which offered consistent yes and no answers for Retail DSL qualification began production in the spring of 1999. All additional wire centers were loaded into the LQDB in the spring of 2000. With the addition of the remainder of the wire centers, CLECs have the ability to obtain loop qualification information for all

wire centers, even those in which Qwest does not provide DSL services. Since that time, Qwest has continued to add functionality to the LQDB, for example:

- The ability to query by TN (up to 24) or address (up to 24 loops)
- The ability to query for resale or unbundled services
- The ability to receive loop makeup information on published or non-published numbers
- The ability to receive loop makeup information on assigned/working loops
- The ability to receive loop makeup information on unassigned/spare loops
- The ability to receive loop makeup information on loops assigned to CLECs as well as Qwest, and
- A "recent changes" check, whereby the most up-to-date loop information is retrieved from LFACS.

Arizona Agreement

In Arizona, Qwest, with input from both AT&T and Covad, agreed to the following SGAT language. Qwest will be incorporating this language in all of its SGATs as those documents are updated.

> 9.2.2.8.6: If the Loop make-up information for a particular facility is not contained in the Loop qualification tools, if the Loop qualification tools return unclear or incomplete information, or if CLEC identifies any inaccuracy in the information returned from the Loop qualification tools, and provides Qwest with the basis for CLEC's belief that the information is inaccurate, then CLEC may request, and Qwest will perform a manual search of the company's records, back office systems and databases where Loop information resides. Qwest will provide CLEC via email, the Loop information identified during the manual search within forty-eight (48) hours of Qwest's receipt of CLEC's request for manual search. The email will contain the following Loop makeup information: composition of the Loop material; location and type of pair gain devices, the existence of any terminals, such as remote terminals or digital Loop terminals, Bridged Tap, and load coils; Loop length, and wire gauge. In the case of Loops served by digital Loop carrier, the email will provide the availability of spare feeder and distribution facilities that could be used to provision service to the Customer, including any spare facilities not connected to the Switch and Loop makeup for such spare facilities. After completion of the investigation, Qwest will load the information into the LFACS database, which will populate this Loop information into the fields in the Loop qualification tools.

Question:

Provide the references, within the record, to the Bulk Deloading Program.

Answer:

- Multi-state Transcript, pages 10-11 (April 30, 2001). See Attachment 5, Appendix K, Iowa Volume 1, Tab 372

- Multi-state Transcript pages 114 and 313-315 (May 1, 2001). See Attachment 5, Appendix K, Iowa Volume 1, Tab 409

- Exhibit WS6-QWE-JML-4 at pages 3-9 is discussed in the transcript on April 30, 2001. See Attachment 5, Appendix K, Idaho Volume 1, Tab 414

- Colorado Workshop Transcript, November 1, 2000 at pages 179-200. See Attachment 5, Appendix K, Colorado, Volume 1 Tab 409

- Emerging Services Rebuttal Exhibits of Karen Stewart, dated October 25, 2000. See Attachment 5, Appendix K, Colorado Volume 1, Tab 408. Exhibit KAS-12 is the letter of Notification sent to CLECs regarding Bulk Deload Project discussed in transcript

- Colorado Transcript dated April 18, 2001, pages 51-63 and page 217. See Attachment 5, Appendix K, Colorado Volume 1, tab 676

- *See also* www.qwest.com/disclosure459/deload.html.